THE EVOLUTION OF NEW MEDICAL DEVICES AND TECHNOLOGIES

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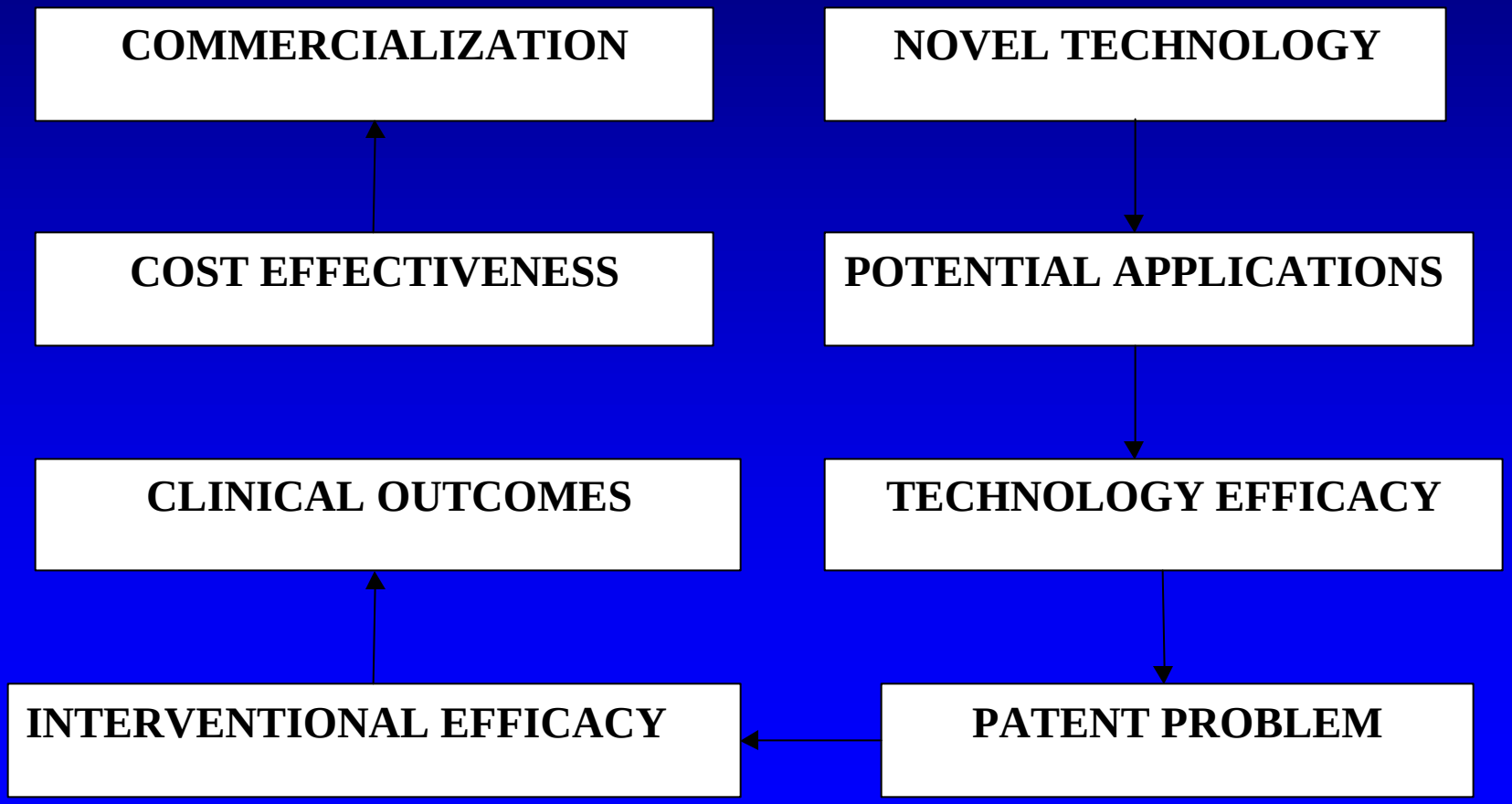
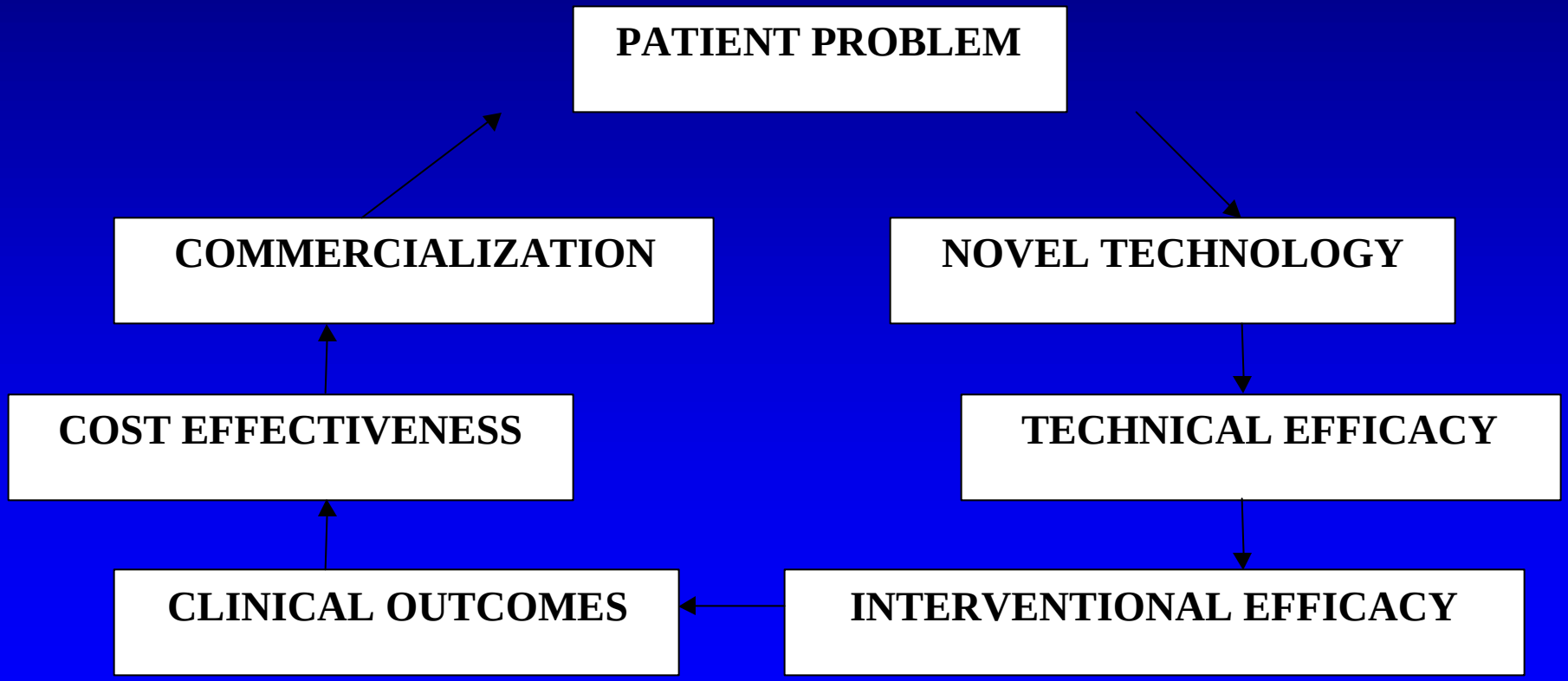
MODELS OF TECHNOLOGY EVOLUTION

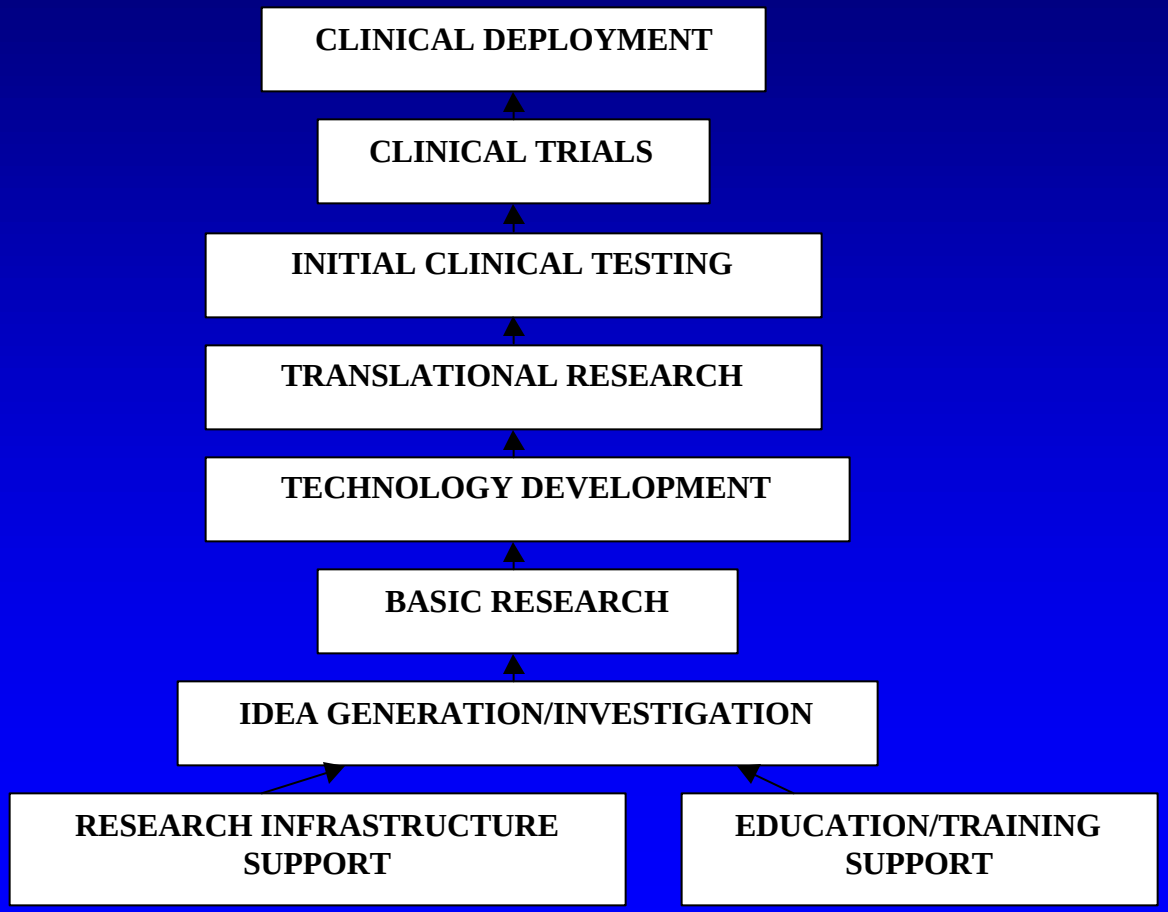
TECHNOLOGY EVOLUTION THROUGH TECHNICAL PUSH



TECHNOLOGY EVOLUTION THROUGH CLINICAL PULL



SYSTEMS APPROACH TO TECHNOLOGY DEVELOPMENT



SYSTEMS MODEL FOR TECHNOLOGY DEVELOPMENT

- Team approach
- Effective communication
- Organizational endorsement
- Investment in high risk, high impact ideas
- Technology-driven and hypothesis-driven research support

SYSTEMS MODEL FOR TECHNOLOGY DEVELOPMENT (cont'd)

- Evolutionary (incremental) and revolutionary (quantum leap)
- Consensus-building approach
- Realistic cost and time estimates
- Evaluation steps: validation, efficacy, efficiency

SYSTEMS MODEL FOR TECHNOLOGY DEVELOPMENT (cont'd)

- Both engineering and clinical validation
- Evaluation: faster, better, cheaper
- Intermediate and final endpoints
- Development chilled by excessive regulation

EDUCATION/TRAINING FOR TECHNOLOGY DEVELOPMENT

- Mentor oversight
- Multi-modality information in real time
- Collaborative education/training
- Exploratory culture
- Engineering/Clinical Integration
- Dedication to research

MEDICAL TECHNOLOGIES AND DEVICES WISCONSIN INTELLECTUAL CAPITAL

- Industry/Business
- Healthcare Institutions
- Academia

CHALLENGE

How can Wisconsin use its intellectual capital in medical technologies and devices to create new jobs and expand its economic growth?